

# AN ENEMY OF THE WESTERN RED CEDAR

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(WITH PLATE 122, CONTAINING 2 FIGURES)

The species described below was first sent to me from Idaho by Mr. Weir. Since the description was drawn, Mr. Weir wrote me under date of December 17, 1913, as follows:

During the past season, the species has been abundantly collected throughout northern Idaho and Washington. It has been found to be of far greater importance in its relation to the decay of the western red cedar than my previous observations showed. Not only is it the principal fungus concerned in the basal decay of the living tree, but it continues the destruction of the heartwood and later of the sapwood after the tree has fallen and may extend along the entire tree, even attacking the bark. The chemical action of the mycelium on the wood results in a separation of the annual layers in the initial stages of decay, later developing a brown, friable rot quite characteristic and easily recognized. The damage caused by the fungus in the western red cedar is great enough to be made a special project for the coming field season.

## *Fomitiporia Weirii* sp. nov.

Broadly effused, often extending many feet along the trunk, irregular, adnate, rather soft, of light weight, flexible when young, 3-10 mm. thick, margin rather thick, adnate or slightly seceding, undulate, lobed, or irregular, broadly sterile, ferruginous to fulvous, velvety-tomentose; context conspicuous, fulvous, punky, soft and flexible; hymenium plane or conformed to the substratum, fulvous-umbrinous, often with an avellaneous tint; tubes indistinctly 2-3 times stratified in older specimens, 2-4 mm. long each season, avellaneous within; mouths angular, stuffed when young, minute, about 6 to a mm., edges thin, entire; spores ellipsoid, smooth, hyaline,  $5 \times 3 \mu$ ; hyphae ferruginous; cystidia conic, tapering to a sharp point, not ventricose at the base, fulvous, filled with contents, sometimes strongly curved,  $35-50 \times$

5-10  $\mu$ , the concolorous, tapering stalk often reaching 50  $\mu$  in length, but narrower than the projecting portion.

Type collected on a trunk of *Thuja plicata* at Priest River, Idaho, in the Kaniksu National Forest, in 1912, by James R. Weir. Common throughout the northwest, according to Mr. Weir, and confined to *Thuja plicata*. Younger stages would be referred to *Fuscoporia*, and the older stages sometimes have rather the appearance of "reviving" from year to year instead of being truly perennial, as is the case in most species of *Fomitiporia*. For the benefit of those using Saccardo's nomenclature, the species is here recombined as **Poria Weirii** Murrill.

NEW YORK BOTANICAL GARDEN.

#### EXPLANATION OF PLATE CXXII

Fig. 1. *Fomitiporia Weirii* as it appears normally, and also when reviving and a new layer of tubes is being formed.

Fig. 2. Initial stages in the decay caused by the above species, showing the separation of the annual rings of the host.